

Claims:

1. An apparatus comprising:
an estimator adapted to predict an occurrences of a
predetermined amplitude level in an in-phase and quadrature phase
5 (I/Q) complex trajectory plane; and
a deflector which is adapted to deflect the I/Q complex
trajectory from an origin of the I/Q complex trajectory plane according
to an estimator prediction.

10 2. The apparatus of claim 1, wherein the deflector is adapted to receive
samples of an I/Q data stream and deflect the I/Q complex trajectory
of the I/Q data stream according to I/Q complex trajectory correctives
parameters.

15 3. The apparatus of claim 2, wherein the estimator is adapted to receive
at least two consecutive symbols of the I/Q data stream and
determined whether or not to provide the I/Q complex trajectory
correctives parameters according to at least two consecutive
symbols.

20 4. The apparatus of claim 3, wherein the estimator adapted to provide
the trajectory corrective parameters according to estimated distance
between the origin of the complex trajectory plane to the I/Q complex
trajectory.

25 5. The apparatus of claim 4, further comprising:
an adjustable deflection window adapted to a weighting
window.

30 6. A portable communication device comprising:

an estimator adapted to predict an occurrences of a predetermined amplitude level in an in-phase and quadrature phase (I/Q) complex trajectory plane.

5 7. The portable communication device of claim 6 further comprising:
 a deflector which is adapted to deflect the I/Q complex trajectory from an origin of a complex trajectory plane according to the estimator prediction.

10 8. The portable communication device of claim 7, wherein the deflector is adapted to receive samples of I/Q data stream and deflects the I/Q complex trajectory of the I/Q data stream according to I/Q complex trajectory correctives parameters.

15 9. The portable communication device of claim 8, wherein the estimator adapted to receive at least two consecutive symbols of the I/Q data stream and to decide whether or not to provide the I/Q complex trajectory correctives parameters according to at least two consecutive symbols.

20 10. The portable communication device of claim 9, wherein the estimator adapted to provide the trajectory corrective parameters according to adjustable deflection window.

25 11. The portable communication device of claim 10, wherein the adjustable deflection window is adapted to a weighting window.

12. The portable communication device of claim 11, further comprises a data source for providing the I/Q data stream and an antenna.

13. The portable communication device of claim 11, further comprises an outphasing radio frequency (RF) amplifier with a reactive termination.

14. An apparatus comprising:

5 an estimator adapted to predict an occurrences of a predetermined amplitude level in an in-phase and quadrature phase (I/Q) complex trajectory plane which be deflected from an origin of a complex trajectory plane according to the estimator prediction.

10 15. The apparatus of claim 15 further comprising:

 a channelization and spreading block which is operably coupled to a pulse shaping filter and to the estimator wherein the pulse shaping filter is operably coupled to the deflector;

 an digital to analog converter which receive signals from the deflector and output signals to a filter; and

 an upconverter which receives signals from the filter and adapted to upconvert the signals into a radio frequency signals.

15 16. The apparatus of claim 15, further comprises a sampler which receives an in-phase and quadrature (I/Q) phase data stream from the channelization and spreading block and adapted to provide samples of I/Q data stream to the estimator.

20 17. A method comprising:

 predicting occurrence of a predetermined amplitude level in an in-phase and quadrature phase (I/Q) complex trajectory plane.

25 18. The method of claim 18 further comprising:

 deflecting an I/Q complex trajectory from an origin of a complex trajectory plane according to a prediction.

19. The method of claim 18, wherein deflecting comprises:
deflecting the I/Q complex trajectory of the I/Q data stream
according to I/Q complex trajectory corrective parameters.

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20. The method of claim 19 wherein predicting comprises:
deciding whether or not to provide to I/Q complex trajectory
corrective parameters according to a data of at least two consecutive
symbols of the I/Q data stream.

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21. The method of claim 20, further comprising:
providing the trajectory corrective parameters according to
adjustable deflection window.

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22. An article comprising: a storage medium having stored thereon
instructions, that, when executed by a computing platform, results in:
predicting occurrence of a predetermined amplitude level in an
in-phase and quadrature phase (I/Q) complex trajectory plane; and
deflecting an I/Q complex trajectory from an origin of a complex
trajectory plane according to a prediction.

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23. The article of claim 22, wherein the instructions of deflecting result
in:
deflecting the I/Q complex trajectory of the I/Q data stream
according to I/Q complex trajectory corrective parameters.

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24. The article of claim 23 wherein instructions of predicting result in:
deciding whether or not to provide to I/Q complex trajectory
corrective parameters according to a data of at least two consecutive
symbols of the I/Q data stream.

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25. The article of claim 24, wherein instructions further result in:
providing the trajectory corrective parameters according to
estimated distance between the origin of the complex trajectory plane
to the I/Q complex trajectory.